



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/820,996 | 04/08/2004 | Nicholas A. Matiash | 29759/ITW-14675 | 9049 |
| 23482 | 7590 | 05/23/2006 | EXAMINER | |
| WILHELM LAW SERVICE, S.C. 100 W LAWRENCE ST THIRD FLOOR APPLETON, WI 54911 | | | | KERNS, KEVIN P |
| ART UNIT | | PAPER NUMBER | | |
| 1725 | | | | |

DATE MAILED: 05/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) |
|------------------------------|------------------------|---------------------|
| | 10/820,996 | MATIASH ET AL. |
| Examiner | Art Unit | |
| Kevin P. Kerns | 1725 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 18 April 2006.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-37 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) Claim(s) _____ is/are allowed.
6) Claim(s) 1-37 is/are rejected.
7) Claim(s) 6,8 and 32-36 is/are objected to.
8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 08 April 2004 is/are: a) accepted or b) objected to by the Examiner.

 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/8/04, 12/13/04, 10/14/05

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ .

5) Notice of Informal Patent Application (PTO-152)

6) Other: ____ .

DETAILED ACTION

Election/Restrictions

1. Applicants' election with traverse of Group I (claims 1-17) in the reply filed on April 18, 2006 is acknowledged. The traversal is on the ground(s) that a serious search burden would not be necessary. Upon further consideration, this argument is found to be persuasive because a search for any of the three groups of drive roll structures would include searches in both classes 219 and 226. As a result, all claims of record included in the three groups (claims 1-37) are examined in their entirety in this Office Action.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "270" has been used to designate both a power block base (Figures 8A and 8B) and a threaded nut (last line of page 26 of specification, but not shown in the drawings). In addition, reference character "22" has been used to designate both a nut (Figure 1) and a (different) nut within the cover assembly of Figure 15. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are

not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

In this instance, the legal term "comprises" in the 1st and 3rd lines should be replaced by "includes".

4. The disclosure is objected to because of the following informalities: on page 11, line 28, replace "52" with "53" after both instances of "reel". On page 13, line 29, insert "(FIG. 15)" after "163" for further clarity, as "pins 163" had not been mentioned in any of the other figures up to this point in the specification. On page 24, lines 21, 22, and 26, replace "bock" with "block". On page 24, last line, replace "4" with "14" after "FIG.". On page 29, line 16, replace "235" with "225" after "spring". Appropriate correction is required.

Claim Objections

5. Claims 6, 8, and 32-36 are objected to because of the following informalities: in claim 6, 3rd line, insert “,” after “therebetween” for clarity. In claim 8, 2nd line, insert “and” before “magnitude” for clarity. In claims 32-36, all references to “Claim 30” should be replaced by “Claim 31”. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 17, 30, and 37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 17, 30, and 37 provide for the use of wire feeder assemblies, but since the claims do not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 17, 30, and 37 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App.

1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-37 are rejected under 35 U.S.C. 102(b) as being anticipated by Shaputis (US 4,068,106).

Shaputis discloses a welding apparatus that includes a wire feeder and drive feed roller assembly, in which the drive roller assembly includes one or more drive rolls adapted to feed weld wire 12 having a predetermined diameter, with the drive roll(s) including first and second sides (Figures 2-4), and having drive roll body (bodies) between the first and second sides; outer body surfaces about a periphery of the drive roll body, with the outer body surface(s) comprising respective base body surface(s) in the form of multiple (first, second, and third) circumferentially-extending grooves/channels/recesses (52,74) of angular cross-section corresponding to a

diameter of weld wire 12; and multiple separate elevated wire interfaces in the form of ridges 72 (plurality of elevated circumferential peaks that comprise rims at a defined distance away from an axis of rotation of the drive rolls in the assembly of Figure 4, which form adjacent first and second circumferential peaks at the interfaces of the adjacent roller segments 60) at a major circumferential portion (i.e. greater interface diameter than the magnitude of the body diameter) of the base body surface(s) that define(s) the grooves 74 therebetween, such that the two central elevated wire interfaces are adjacent, but displaced from, both the first and second sides of the drive roll body/bodies (abstract; column 1, lines 51-68; column 2, lines 1-32 and 54-68; column 3, line 1 through column 4, line 47; and Figures 2-5).

10. Claims 1-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Seufer (US 5,816,466).

Seufer discloses a wire feeding apparatus having a drive roll assembly for feeding consumable welding electrode wire from a supply reel to a welding gun, in which the drive roller assembly includes drive rolls 118 adapted to feed weld wire W having a predetermined diameter, with the drive rolls 118 including first and second sides (Figure 13), and each having a drive roll body between the first and second sides; outer body surfaces about a periphery of the drive roll body, with the outer body surface(s) comprising respective base body surface(s) in the form of multiple (first and second) circumferentially-extending grooves/channels/recesses (146,148) of angular cross-section corresponding to a diameter of weld wire W; and multiple separate

elevated wire interfaces in the form of ridges adjacent grooves 146,148 (plurality of elevated circumferential peaks that comprise rims at a defined distance away from an axis of rotation of the drive rolls in the assembly of Figures 11-13) at a major circumferential portion (i.e. greater interface diameter than the magnitude of the body diameter) of the base body surface(s) that define(s) the grooves (146,148) therebetween, such that the elevated wire interface is adjacent, but displaced from, both the first and second sides of the drive roll body (abstract; column 3, lines 56-67; column 4, lines 1-5; column 7, lines 17-49; column 10, lines 27-67; column 11, lines 1-56; column 14, lines 56-67; column 15, lines 1-24; and Figures 1, 11-13, and 18).

11. Claims 1-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Plow (US 6,536,644).

Plow discloses a feedroll for a wire feeder apparatus having a drive roll assembly for feeding weld wire in a welding machine, in which the drive roller assembly (feedroll 1, motor 27, drive shaft 31 etc.) includes a drive roll (feedroll 1) adapted to feed weld wire 45 having a predetermined diameter via a wire feeder 25, with the drive roll 1 including first and second sides (Figures 2, 4-6, and 8-11), and having a drive roll body between the first and second sides (feedroll ends 7,9); outer body surfaces about a periphery 3 of the drive roll body, with the outer body surface(s) comprising respective base body surface(s) in the form of multiple (first and second) circumferentially-extending grooves/channels/recesses (11,13) of differing angular cross-sections corresponding to a diameter of weld wire 45; and multiple separate elevated wire

interfaces in the form of ridges adjacent grooves 11,13 (plurality of elevated circumferential peaks that comprise rims at a defined distance away from an axis of rotation of the drive rolls in the assembly of Figures 2, 4-6, and 8-11) at a major circumferential portion (i.e. greater interface diameter than the magnitude of the body diameter) of the base body surface(s) that define(s) the grooves (11,13) therebetween, such that the elevated wire interface is adjacent, but displaced from, both the first and second sides (7,9) of the drive roll body (abstract; column 1, lines 8-10 and 47-67; column 2, lines 1-32 and 67-68; column 3, lines 1-67; column 4, lines 1-63; and Figures 2, 4-6, and 8-11).

12. Claims 1-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Enyedy (US 2005/0006425).

Enyedy discloses a wear resistant drive roller for a wire feeding mechanism for feeding consumable welding electrode wire from a supply reel to a welding gun, in which the drive roller assembly includes drive rollers (36,38,40,42) adapted to feed weld wire 18 having a predetermined diameter, with the drive rollers (36,38,40,42) including first and second sides (Figures 2 and 3), and each having a drive roll body between the first and second sides; outer body surfaces about a periphery of the drive roll body, with the outer body surface(s) comprising respective base body surface(s) in the form of multiple (first and second) circumferentially-extending grooves/channels/recesses (58,58') of angular cross-section corresponding to a diameter of weld wire 18; and multiple separate elevated wire interfaces in the form of ridges adjacent grooves 58,58'

(plurality of elevated circumferential peaks that comprise rims at a defined distance away from an axis of rotation of the drive rolls in the assembly of Figures 2 and 3) at a major circumferential portion (i.e. greater interface diameter than the magnitude of the body diameter) of the base body surface(s) that define(s) the grooves (58,58') therebetween, such that the elevated wire interface is adjacent, but displaced from, both the first and second sides of the drive roll body (abstract; paragraphs [0021]-[0028]; and Figures 1-3).

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 3,331,545 and DE 299 20 227 references are also cited in PTO-892.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Kevin P. Kerns whose telephone number is (571) 272-1178. The examiner can normally be reached on Monday-Friday from 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin P. Kerns *Kevin Kerns 5/12/06*
Primary Examiner
Art Unit 1725

KPK
kpk
May 12, 2006